

## Page 1 of 1

All amounts are calculated in domestic currency.

[illegible]

# B I L L O F L A D I N G

No: PEC 60379

Ship From:  
THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 905-738-9033

Ship Date 22Aug17 at 11:54 From PFW  
Probill  
Via VIM DELIVERY  
FOB CONCORD  
Frt PREPAID  
Route 0- 0 Manifest  
Vhcle Trailer  
Slp STAN IVERS (905-532-1350)  
Sold To: ( 20115)  
DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

Ship To: ( 1)  
DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7  
Tel: 613-632-9577 Fax: 613-632-1053

## B I L L O F L A D I N G

1) Our Order PEC- 84421- 1 Your PO # 37472  
STAINLESS STEEL ROUND BAR 17-4 STAINLESS  
.750" DIA X 144.0000"

MTR

Heat Number 265874  
Tag No 682977

Quantity 12 FT PCS 1 Wt LBS 18

2) Our Order PEC- 84421- 2 Your PO # 37472  
STAINLESS STEEL ROUND BAR 303 STAINLESS  
.750" DIA X 144.0000"

Heat Number 479E  
Tag No 682978

Quantity 48 FT PCS 4 Wt LBS 74

3) Our Order PEC- 84421- 3 Your PO # 37472  
ALUMINUM FLAT BAR 6061-T6511  
.125" x .750" X 240.0000"

Heat Number 3B5358  
Tag No 682979

Quantity 40 FT PCS 2 Wt LBS 5

TOTAL: Tags 3 PCS 7 Wt LBS 97

Heat Number \*\*\* Chemical Analysis \*\*\*  
265874  
3B5358  
479E

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR

Page: 1 ....Continued

Sp 17-8-23.

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.  
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

## B I L L O F L A D I N G

No: PEC 60379

Ship From:  
THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 905-738-9033

Ship Date 22Aug17 at 11:54 From PFW  
Probill  
Via VIM DELIVERY  
FOB CONCORD  
Frt PREPAID  
Route 0- 0 Manifest  
Vhcle Trailer  
Slp STAN IVERS (905-532-1350)  
Sold To: ( 20115)  
DART AEROSPACE

Ship To: ( 1)  
DART AEROSPACE

## B I L L O F L A D I N G

TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*  
\*\* REFERENCED ON IT \*\*

TOTAL 2 BDLS GW. 120 LBS

\*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA  
CONCORD, ONT.\* \*\*\* 9:00 AM TO 4:00 PM \*\*\*

\*\*\*\* TEL. 800-926-2600 \*\*\*\*

\*\*\*\*\* WE STOCK STAINLESS STEEL \*\*\*\*\*

\* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*  
\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
ADDED TO EVERY ORDER.\*\*\*

\*\*\*\*\*

\*\*\*UNE SURCHARGE D'ENERGIE DE \$25.00

SERA AJOUTEE A CHAQUE COMMANDE.\*\*\*

\*\*\*POUR VOS BESOINS D'ACIER INOXYDABLE,

\*CONTACTEZ-NOUS. NOUS L'AVONS! TEL. 800-926-2600\*

SPR 8.23

Page: 2 .... Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.  
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

VOI/OST# 1017327081 T0001 TPS/OST TUV/HST # 140222024 PT0001

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 17-4 STAINLESS  
.750" DIA X 144.0000"  
PART NO.

PO/Rel 37472

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-060379-001

22Aug17

Signed by:

Pg 1/3



**Acciaierie Valbruna S.p.A.**

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.  
Telefono 0444.968211 - Fax 0444.963836  
Stab.: 36100 BOLLANO (Italia) - Via A. Volta, 4/37  
Telefono 0471.924111 - Fax 0471.924497

### CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a: **EN 10204 (2004) , 3.1**

Certificato nr. **MEST695635 / 2015 / 1**

Cliente / Besteller/Purchaser/Client  
**VALBRUNA CANADA LTD**  
**8724 HOLGATE CRESCENT**  
**L5T 5Z1 - MILTON, ONT L5T 5Z1 - CA**

Stato di fornitura: **Hot rolled - COND. A Peeled**  
**Reeled/Polished**

Produttore:  
**ACCIAIERIE VALBRUNA S.P.A.**

Ordine nr: **411005034 Stock - Canada**  
Bestell  
Your order  
Commande

Tipo di Elaborazione: **E+AOD**  
Eisenherstellung  
Melting process  
Mode d'elaboration

Marchi di Fabbrica:  
Zeichen des Werks  
Trade marks  
Sigles de l'usine productrice

Conferma ordine nr: **E114011935**  
Werk/Our OrderRef nr:

Qualità: **630**  
Werkstoff/Grade/Qualité

Punzone del Collaudatore:  
Stempel des Werkstoffversuchenden  
Inspector's stamp/Prinzip de l'inspecteur

Avviso di Spedizione: **D-VI15014819**  
Lieferanfrage/Shipping list/B.L.

Marcia: **V174**  
Markenbezeichnung  
Brand / Marque

Punzonatura: **630**  
Kennzeichnung  
Marking  
Marquage

SPECIFICHE:	Note:
Anforderungen / Requirements / Exigences	Auflagehinweise / Notes / Notes
VSI 2 630 A AISI 630 AMS 2303 F. AMS 5843 T S17400 A ASME SA564 2013 S17400 A (0) ASTM A370 2014. ASTM A564 2013 S17400 A	(0)SECTION II PART A 2013 EDITION

Tolleranza: ASTM A484-16 TABLE 7		Tolerances/Abweichungen/Tolerances	
Pos. nr.	Oggetto	Dimensioni - in	Lunghezza - in
Pos. nr. Item nr. nr. des points	Oggetto Product description Objet de produit	Dimensioni - in Abmessungen Dimensionen Dimensions	Lunghezza - in Länge Longueur Längener
0060	Round	0,7500	146/ 146

TEST ALLO STATO DI FORNITURA									
Test on delivery condition / Prüfung auf lieferbarem Produkt / Test à l'état de fourniture / Prueba sobre el material así como entregado									
TEST	Proveita/ Proveita Eigenschaften/Eigenschaften La 10 items items Bruit/Clou, Clou Weld/Clou, Clou Liqu/Clou, Clou	Pos. Suppl P. Suppl P. Suppl	Snervamento Snervamento Tensile Stress Lieu de essai	Snervamento Snervamento Tensile Stress Lieu de essai	Resistenza Resistenza Tensile Strength Résistance à la traction	Allungamento Allungamento Elongation Allongement	Strizione Strizione Reduction of area Striction	Resilienza Resilienza Impact Value Resilience	Durezza Durezza Hardness Dureté
Valori richiesti	min	max	-	-	-	-	-	-	363
A									340

TEST ALLO STATO DI FORNITURA			
Test on delivery condition / Prüfung auf lieferbarem Produkt / Test à l'état de fourniture / Prueba sobre el material así como entregado			
TEST	min	max	
A Delta Ferrite		5,0	1,0 %
A Grain size for ASTM E112			5
A RATINGS FREQUENCY		1,10	0
A RATINGS SEVERITY		1,05	0

Vicenza, 23/11/16

VCC006 - MEST951072

(Mod. MCEZ)

Il collaudatore di stabilimento / der Werkstoffversuchende / Works inspector / L'agent d'usine

M. RIZZOTTO

Pagina - 1 di 3

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 17-4 STAINLESS  
.750" DIA X 144.0000"  
PART NO.

PO/Rel 37472

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-060379-001

22Aug17

Signed by:

Pg 2/3



**Acciaierie Valbruna S.p.A.**

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.  
Telefono 0444.968211 - Fax 0444.968386  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4/37  
Telefono 0471.924111 - Fax 0471.924497

### CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a: **EN 10204 (2004), 3.1**

Certificato nr. **MEST695635 / 2015 / 1**

Cliente / Besteller/Purchaser/Client  
**VALBRUNA CANADA LTD**  
8724 HOLGATE CRESCENT  
L5T 5Z1 - MILTON, ONT L5T 5Z1 - CA

Stato di fornitura: **Hot rolled - COND. A Peeled**  
Lieferzustand: **Reeled/Polished**  
Delivery state: **Reeled/Polished**

Produttore:  
**ACCIAIERIE VALBRUNA S.P.A.**

Ordine nr. **411005034 Stock - Canada**  
Bestell  
Your order  
Commande

Tipo di Elaborazione: **E+AOD**  
Erstellungsmethode  
Making process  
Méthode d'élaboration

Marchi di Fabbrica:  
Zeichen des Lieferanten  
Trade marks  
Sigle de l'usine productrice



Conferma ordine nr. **E14011935**

Qualità: **630**  
Werkstoff/Grade/Qualität

Punzone del Collaudatore:  
Stempel des Überwachungsstädtigen  
Inspector's stamp/Emboss of the assayer

**MR**

Avviso di Spedizione: **D-V115014819**  
Lieferanweisung/Shipping instructions

Marca: **V174**  
Markenbezeichnung  
Brand - Nuance

Punzonatura: **630**  
Kennzeichnung  
Marking  
Marquage

Sample cond. H900

Tipo Trattamento	Temperatura	Raffreddamento	Permanenza	Tipo Trattamento	Temperatura	Raffreddamento	Permanenza	Tipo Trattamento	Temperatura	Raffreddamento	Permanenza
Heat treated under argon	Temperatura	Quenching	Hold time	Heat treated under argon	Temperatura	Quenching	Hold time	Heat treated under argon	Temperatura	Quenching	Hold time
Tratamiento térmico	Temperatura	Quenching	Hold time	Tratamiento térmico	Temperatura	Quenching	Hold time	Tratamiento térmico	Temperatura	Quenching	Hold time
Ageing	800°F	AIR	60'								
1) L'Espédition est faite, l'acier est traité, C/T Température/Température											
TEST	PROVETTA / Probe	Prova	Snervimento	Snervimento	Resistenza	Allungamento	Strizione	Resistenza	Durezza		
	Standard Specimen	Prova	Yield Stress	Yield Stress	Tensile strength	Elongation	Reduction of area	Impact Value	Hardness		
	Standard Specimen	Prova	Yield Stress	Yield Stress	Tensile strength	Elongation	Reduction of area	Impact Value	Hardness		
	Standard Specimen	Prova	Yield Stress	Yield Stress	Tensile strength	Elongation	Reduction of area	Impact Value	Hardness		
Valori richiesti	min	max	170	-	190	10	40	-	388		
Valori ottenuti	min	max	170	-	190	10	40	-	388		
B	12,5	68	L	180	200	16	57		427		

Mechanical properties according to ASTM A370.  
Delta Ferrite according to AMS 2315.

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis (wt. %)													
Color / Farbe	min	max	15,08	3,00	3,00	0,042	0,001	0,045	0,0018				
Schmelze/Coarse	min	max	15,08	3,00	3,00	0,042	0,001	0,045	0,0018				
265874	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %	Ta %	
	0,038	0,42	0,41	15,18	0,17	3,34	4,58	0,048	0,027	0,001	0,045	0,0018	
Color / Farbe	min	max	0,150	0,350									
Schmelze/Coarse	min	max	0,150	0,350									
	Nb%+Ta%		Cb(Nb)%										
265874	0,286		0,284										

Ultrasonic volumetric test according to ASTM A388: pass.  
Micro and macro etch test: satisfactory.  
Produced without class I-II Ozone depleting substances.  
Macroetch test per ASTM E340: acceptable.  
Furnace calibrated according to AMS-H-6875.  
Pyrometry in accordance with AMS2750.  
Reduction ratio = 103,2 : 1  
Material solution annealed 1904°F for 1 h  
air cooled to below 90°F.  
Material is DFARS Compliant

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind erfüllt  
The material has been furnished in accordance with the requirements  
La matière a été livrée conformément aux exigences

Controllo antimiscelazione: OK  
Verwechslungsprüfung: zufriedenstellend durchgeführt  
Antimixing testing performed: OK  
Controllo omologazione: OK

Controllo visivo e dimensionale: soddisfa le esigenze  
Brennprüfung und Dimensionierung: ohne Beanstandung  
Visual inspection and dimensional check: satisfactory  
Contrôle visuel et dimensionnel: satisfaisant

Vicenza, 23/11/16

VCOU08 - MEST695635

(Mod. MCE2)

Il collaudatore di stabilimento / der Werksaufseher / the Works Inspector / L'agent d'usine

**M.RIZZOTTO**

Pagina - 2 di 3



# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 17-4 STAINLESS  
.750" DIA X 144.0000"  
PART NO.

PO/Rel 37472

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-060379-001

22Aug17

Signed by: 

Pg 3/3



### Acciaierie Valbruna S.p.A.

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.  
Telefono 0444.968211 - Fax 0444.963836  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4/37  
Telefono 0471.924111 - Fax 0471.924497

#### CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a: **EN 10204 (2004), 3.1**

Nach/According to/Sein

Certificato nr. **MEST695635 / 2015 / 1**

Prüfung/Exam/Examen

Cliente / Besteller/Purchaser/Cient  
**VALBRUNA CANADA LTD**  
8724 HOLGATE CRESCENT  
L5T 5Z1 - MILTON, ONT L5T 5Z1 - CA

Stato di fornitura: **Hot rolled - COND. A Peeled**  
Lieferzustand: **Reeled/Polished**  
Lieferungszustand: **Reeled/Polished**  
Etat de livraison: **Reeled/Polished**

Produttore:  
Hersteller/Hersteller/Hersteller  
**ACCIAIERIE VALBRUNA S.P.A.**

Ordine nr: **411005034 Stock - Canada**

Bestell  
Your order  
Commande

Tipo di Elaborazione: **E+AOD**

Erzeugnisbezeichnung  
Delivery process  
Mode d'élaboration

Marchi di Fabbrica:

Zeichen des Herstellers  
Trade marks  
Signes de l'usine productrice



Conferma ordine nr: **EI14011935**

WerkAuftrag/Order/Ref nr

Qualità: **630**

Qualitäts-/Qualitätsbezeichnung

Punzone del Collaudatore:  
Sampel des Werkstoffversuchsanstaltigen  
Inspector's stamp/Prüfung des Tassegeur

MR

Aviso di Spedizione: **D-VI15014819**

Lieferanweisung/Packing Mark L

Marcas: **V174**

Markenbezeichnung  
Brand / Marques

Punzonatura: **630**

Markierung  
Marking  
Marquage

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER ACCORDING TO ISO 9001 : 2008, ISO/TS 16949 : 2009, AS 9100C

The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1, s. 4.3 and 2014/68/EU by TÜV and LLOYD'S  
Any act of tampering, modification, alteration, counterfeiting and/or falsification and/or any other action which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.  
Maximal and/or Valplus grades/products are manufactured with ladle techniques to control composition, distribution, size and shape of non-metallic inclusions for improved machinability.

The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any case different applications than those the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least, upon order of the Product by the Purchaser. Acciaierie Valbruna SpA shall not be responsible for any improper use of the Products.

Vicenza, 23/11/18

VC0008 - MEST6951072

[Mod. MCEZ]

Il collaudatore di stabilimento / der Werkstoffversuchsanstaltige / Works inspector / L'agent d'usine

M. RIZZOTTO 

Pagina - 3 di 3

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.125" x .750" X 240.0000"

PART NO.

PO/Rel 37472

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-060379-003

22Aug17

Signed by: 

Pg 1/1

# CAN ART

ALUMINUM EXTRUSION L.P.

## Material Test Report

Ship To: ThyssenKrupp Materials NA  
2821 Langstaff Road  
Concord, ON L4K 5C6

Manifest: 322439

Ticket:  
5530103

Our Order: 433923 - 1

Cust P.O.: 281574

Die: E805485

Part: 05485-000-240

Alloy Temper: 6061 T6511

Description: .125 x .750

Print Date: 3/28/17

### Chemical Composition Range

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OtherEach	OtherTotal
Min	0.40		0.15		0.8	0.04				
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15

### Mechanical Properties

Strength ksi

Sample ID	Cast #	Lot #	Test Date	Ultimate Tensile	Yield 2% offset	Elongation 2" gage length
426130	<u>3B5358</u>	<u>DAS 5</u> <del>0-991</del>	3/24/17	40.17	36.91	8.4

Applicable Specifications: ASTMB221-14 AMS-QQ-A200/8A

Country of Origin: 85 Parkshore Drive, Brampton, Ontario CANADA L6T 5M1

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.

Rahul Tiwari - Tensile Testing

Authorized: \_\_\_\_\_



Evan Eng, Quality Assurance Manager

## PO/Rei 37472

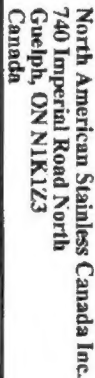
We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

BL PEC-060379-002

22Aug17  
Pg 1/2

## Certificate of Mill Test Results



# METALLURGICAL TEST REPORT

**6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000**

Certificate: 323857 4 Mail To: MIVADOEN

## Ship To:

Date: 8/16/2017 Page: 1

Customer: 007206 001 2821 LANGSTAFF ROAD  
CONCORD, ON L4K5C6

THYSENKRUPP MATERIALS  
2821 LANGSTAFF ROAD  
CONCORD, ON L4K5C6

Steel: 303  
Finish: CD

### **CORROSION:**

**Your Order: PEC284884**

NAS Order: PN 0082890 04

PRODUCT DESCRIPTION:

Round Bar, ~~Unstayed~~ Cold Drawn  
UNS 30300, ASTM A582/12 EN 10204 3.1, ASTM A484/16  
AMS 5640V TYPE 1, 008-7648 CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12b

REMARKS:

COMPLIES W/REQUIREMENTS OF DFCAR 252.225-7009 EU DIRECTIVE 2011/65/EU, RoHS, EAF+AD+CC. NO WELD REPAIR. MELTED AND MFG IN USA FREE FROM MERCURY AND LOW MELTING ALLOY COMBINATIONS

CHEMICAL ANALYSIS											
CIM(Country of Melt)											
ES(Spain)											
US(United States)											
ZA(South Africa)											
JP(Japan)											
Chemical Analysis per ASTM A751/14a											
WAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %	
479E	US	.015	.08	17.19	.28	1.98	.31	.050	8.61	.028	
DAS											

## MECHANICAL PROPERTIES

\_\_\_\_\_

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.



# THYSSENKRUPP MATERIALS NA

DART AEROSPACE  
STAINLESS STEEL ROUND BAR 303 STAINLESS  
750" DIA X 144.0000"  
PART NO.

PO/Rel 37472

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by:

BL PEC-060379-002

22Aug17  
Pg 2/2



North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 323857 5  
Customer: 007206 001  
THYSSENKRUPP MATERIALS  
2821 LANGSTAFF ROAD  
CONCORD, ON L4K5C6

SHIP TO:  
THYSSENKRUPP MATERIALS  
2821 LANGSTAFF ROAD  
CONCORD, ON L4K5C6

Date: 8/16/2017 Page: 1  
Steel: 303  
Finish: CD

Corrosion:

Your Order: PEC284884

NAS Order: PN 0082890 04

### PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw  
UNS 30300, ASTM A582/12 EN 10204 3.1, ASTM A484/16  
AMS 5640V TYPE 1, QQS-7648 CONDITION A  
SOLUTION ANNEAL, TEMP 1900F MIN, ASTM F899/12b

### REMARKS:

COMPLIES W/REQUIREMENTS OF DPAR 252.225-7009 EU DIRECTIVE  
2011/65/EU, ROHS, EAF/AD-CC. NO WELD REPAIR. WELTED AND NFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BI9021 4		.7500		1.169	144.00	5	1	

CHEMICAL ANALYSIS	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
479E	US	.015	.08	17.19	.28	1.98	.31	.050	8.61	.028

S	%	SI %
.3260		.27

### MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	ELONG % 4D
BI9021 4	R L	219.0	73.59	100.17	39.24	23.41

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy  
of the test methods used, the material meets the specifications stated. These results relate only to the items  
tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M174 R0, 750  
 DATE: AUG 22 2017

PO / BATCH NO.: PO37472/M138314

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 12'  
 QUANTITY INSPECTED: 12'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .750  
 THICKNESS RECEIVED: .749  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	N	4ms 5643
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	N	H7 # 265874
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u> <u>5</u>		SIGNED OFF BY: _____	
DATE: <u>9-89</u> <u>AUG 23 2017</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

DAS  
5

PURCHASE MATERIAL: 17-4 PH STAINLESS STEEL 630 SS ROUND BAR  
PER AMS 5643 / ASTM A564  
MINIMUM YIELD STRENGTH = 100 KSI  
MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI

SPECIFICATION: ASTM A564

PART NUMBER: M17-4-R1 X.XXX | WHERE X.XXX = DIAMETER (IN INCHES)  
O.D.

EG. 3.0" DIAMETER BAR = M17-4-R3 000

RELEASED  
2010-06-29

B	REFORMAT DWG. S17400 TYPE 630 ADDED TO PURCHASE MATERIAL (EN DB-1), ADD A564 SPEC (CB-1).	VS	10.05.20
A	NEW ISSUE	CP	05.03.16
REV	DESCRIPTION	BY	DATE
DESIGN	VS		
DRAWN			
CHECKED	VS		
MFG. APPR.	VS		
APPROVED	VS		
DE APPR.	VS		
DATE	10.05.20		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M17-4-R			
TITLE 17-4 SS ROUND BAR			
SCALE NTS			
SHEET 1 OF 1			
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA NOT TO BE USED FOR ANY PURPOSE OR FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303 RO. 750  
 DATE: AUG 23 2017

PO / BATCH NO.: PO37472/1138844

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 48'  
 QUANTITY INSPECTED: 48'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .750  
 THICKNESS RECEIVED: .749  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	45in 4582
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	47 # 479e
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____	DAS <b>5</b> 9-89	SIGNED OFF BY: _____
DATE: <u>AUG 23 2017</u>		DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR  
(NOTE: ~~ASTM A582~~ 304/316 NOT ACCEPTABLE)

SPECIFICATION:  
PART NUMBER:

ASTM A582  
M303R0.750  
DIA. 5

DAS

WHERE "D" DENOTES DIAMETER IN INCHES  
EG. 0.75" ROUND BAR = M303R0.750

RELEASED  
2010-02-02  
AND

B	REFORMAT DWG. ADD SPECS (ZN DA-1).	CP	10.01.05
A	NEW ISSUE	DS	01.12.20
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M303R			
SHEET 1 OF 1			
TITLE			
303 ROUND BAR			
SCALE			
NTS			
DATE 10.01.05			
COPYRIGHT © 2001 BY DART AEROSPACE LTD. ALL RIGHTS RESERVED. NO PART OF THIS PUBLICATION MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.			



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6B.750X.125  
 DATE: AUG 23 2017

PO / BATCH NO.: P037472/M138344

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 401  
 QUANTITY INSPECTED: 401  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .125  
 THICKNESS RECEIVED: .125  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	AMS QQ 4200
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	HT #3B5368
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

<b>QC 18 INSPECTION</b>		<b>ENGINEERING SIGNOFF (if required)</b>	
INSPECTED BY: _____	DAS <b>5</b>	SIGNED OFF BY: _____	
DATE: <u>AUG 23 2017</u>	<u>0-89</u>	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINIUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160)  
OR ASTM B211 OR ~~ASTM B221~~



DAS

PART NUMBER: M6061T6B | T.TTT | X | WWW.WWW | 5 | 9-89  
THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
R 2009-09-03

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (ZM D7-1)	CP	09.07.13
A	NEW ISSUE	DS	01.08.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6B		REV. B	
TITLE 6061-T6 BAR		SHEET 1 OF 1	
SCALE NTS		NTS	
COPYRIGHT © 2001 BY DART AEROSPACE LTD. THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.			

## Q U O T A T I O N

No: PEC ST-83832

## Quoted By:

THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 905-738-9033

## Quoted To: ( 20115)

DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

## Quoted Ship To: ( 1)

DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS

Qtd 18Aug17 Qte Ref

Frt PREPAID

Via

FOB

Tel 613-632-9577 Fax 613-632-1053 Ctc CHANTAL

Slp STAN IVERS (905-532-1350)

## Q U O T A T I O N

QT No: PEC ST-83832

Test Certs: Chem-Y Phys-Y 1 Original copies with Shipment, 1 with Invoice

1 STAINLESS STEEL ROUND BAR 17-4 STAINLESS	1 PCS	18 LBS
.750" DIA X 144.0000"		12 FT
MATERIAL	12 FT @ 7.9000 FT	94.80
ENERGY & CAP SURCHG	25.0000 LOT	25.00
2 STAINLESS STEEL HEX BAR 303 STAINLESS	1 PCS	9 LBS
.50" HEX X 144.0000"		12 FT
MATERIAL	12 FT @ 5.3067 FT	63.68
3 STAINLESS STEEL ROUND BAR 303 STAINLESS	2 PCS	16 LBS
.50" DIA X 144.0000"		24 FT
MATERIAL	24 FT @ 2.3200 FT	55.68
4 STAINLESS STEEL ROUND BAR 303 STAINLESS	1 PCS	12 LBS
.625" DIA X 144.0000"		12 FT
MATERIAL	12 FT @ 4.7500 FT	57.00
5 STAINLESS STEEL ROUND BAR 303 STAINLESS	4 PCS	72 LBS
.750" DIA X 144.0000"		48 FT
MATERIAL	48 FT @ 4.4200 FT	212.16
6 STAINLESS STEEL ROUND BAR 303 STAINLESS	2 PCS	64 LBS
1.00" DIA X 144.0000"		24 FT
MATERIAL	24 FT @ 7.9367 FT	190.48
7 STAINLESS STEEL ROUND BAR 304L	1 PCS	32 LBS
1.00" DIA X 144.0000"		12 FT
MATERIAL	12 FT @ 7.9000 FT	94.80
8 STAINLESS STEEL SHEET 304L-2B DUAL GRADE	1 PCS	160 LBS
.1200 Nom X 48.0000" X 96.0000"		
MATERIAL	1 PCS @ 347.2000 EA	347.20

## Q U O T A T I O N

No: PEC ST-83832

## Quoted By:

THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: ( 20115)  
DART AEROSPACE

Quoted Ship To: ( 1)  
DART AEROSPACE

Q U O T A T I O N				QT No: PEC ST-83832
9 STAINLESS STEEL SHEET 304-2B	2 PCS			160 LBS
.0480 Nom X 48.0000" X 120.0000"				
MATERIAL	2 PCS @	165.0000 EA		330.00
10 STAINLESS STEEL SHEET 304-2B	2 PCS			200 LBS
.0600 Nom X 48.0000" X 120.0000"				
MATERIAL	2 PCS @	208.5200 EA		417.04
11 STAINLESS STEEL SHEET 304-2B	1 PCS			33 LBS
.0250 Nom X 48.0000" X 96.0000"				
MATERIAL	1 PCS @	138.4300 EA		138.43
12 ALUMINUM FLAT BAR 6061-T6511	2 PCS			5 LBS
.125" x .750" X 240.0000"				40 FT
MATERIAL	40 FT @	1.3750 FT		55.00
13 ALUMINUM FLAT BAR 6061-T6511	1 PCS			36 LBS
1.250" x 2.00" X 144.0000"				12 FT
MATERIAL	12 FT @	8.2500 FT		99.00
14 ALUMINUM FLAT BAR 6061-T6511	1 PCS			128 LBS
2.00" x 4.50" X 144.0000"				12 FT
MATERIAL	12 FT @	26.6667 FT		320.00
15 ALUMINUM ROUND BAR 6061-T6511	17 PCS			62 LBS
.562" DIA X 144.0000"				204 FT
MATERIAL	204 FT @	1.1323 FT		230.99
16 ALUMINUM ROUND BAR 6061-T6511	1 PCS			6 LBS
.750" DIA X 144.0000"				12 FT
MATERIAL	12 FT @	4.5833 FT		55.00
17 ALUMINUM ROUND BAR 6061-T6511	1 PCS			18 LBS
1.250" DIA X 144.0000"				12 FT
MATERIAL	12 FT @	5.5883 FT		67.06
18 ALUMINUM SHEET 6061 T6	1 PCS			56 LBS
.1250 Nom X 48.0000" X 96.0000"				
MATERIAL	1 PCS @	183.5600 EA		183.56
19 ALUMINUM SHEET 2024 -T3	1 PCS			27 LBS
.0400 Nom X 48.0000" X 144.0000"				
MATERIAL	1 PCS @	237.5000 EA		237.50
20 ALUMINUM SHEET 2024 -T3	3 PCS			129 LBS
.0640 Nom X 48.0000" X 144.0000"				
Part No * NO STOCK UNTIL LAYE SEPT **				

# Q U O T A T I O N

No: PEC ST-83832

Quoted By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: ( 20115)  
 DART AEROSPACE

Quoted Ship To: ( 1)  
 DART AEROSPACE

Q U O T A T I O N  
 129 LBS @

QT No: PEC ST-83832  
 CWT

MATERIAL

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
 TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*  
 \*\* REFERENCED ON IT \*\*

Price in effect at time of shipment.  
 Price based on receipt of total order.

All weights are theoretical.

All orders are subject to credit approval.

\*\*\*\* TEL. 800-926-2600 \*\*\*\*

\*\*\* CUSTOMER PICK-UP HOURS \*\*\*

\*\*\* 9:00 AM TO 4:00 PM \*\*\*

\*\*\*\*\*

\* WE STOCK STAINLESS STEEL!!!! \*

\* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*

\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
 ADDED TO EVERY ORDER.\*\*\*

\*\*\*\*\*

\*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

\*VISIT OUR WEBSITE: [www.copperandbrass.com](http://www.copperandbrass.com)

\*\*\*\*\*

NO CANCELLATIONS ON PROCESSED MATERIAL.

\*\*\*\*\*

Order Totals: 20 Items 1243 LBS

\*\*\*\*\*

Material	Processing	Freight	Other	Taxes	ORDER AMT
3,249.38			25.00	425.68	3,700.06

\*\*\*\*\*

Taxes: ONHSTS	425.68	0.00	0.00	0.00
---------------	--------	------	------	------



Q U O T A T I O N

No: PEC ST-83833

Quoted By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: ( 20115)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7

Quoted Ship To: ( 1)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Qtd 18Aug17 Qte Ref  
 Frt PREPAID Via FOB  
 Tel 613-632-9577 Fax 613-632-1053 Ctc CHANTAL  
 Slp STAN IVERS (905-532-1350)

Q U O T A T I O N

QT No: PEC ST-83833

Test Certs: Chem-Y Phys-Y 1 Original copies with Shipment, 1 with Invoice

1 ALUMINUM PLATE 7075-T651 DOMESTIC 36.1325 ft 3 PCS 109 LBS  
 1.250" THICK X 2.0000" X 144.5300"

<<<----- SPECIFICATIONS ----->>>

Ga Tol + 0.0000 - 0.0000 Pc/Tag 3

WthTol + 0.1250 - 0.0000 Wt/Skd

LthTol + 0.0000 - 0.0000 Ty Pk

MATERIAL 3 PCS @ 151.0600 EA 453.18 ✓

ENERGY & CAP SURCHG 25.0000 LOT 25.00

2 ALUMINUM PLATE 7075-T651 DOMESTIC 1 PCS 44 LBS

.375" THICK X 8.0000" X 144.5000"

Part No \* NO STOCK BAR OR PLATE \*\*\*

MATERIAL 44 LBS @ LBS

3 ALUMINUM PLATE 7075-T651 DOMESTIC 15.4164 ft 2 PCS 22 LBS

.750" THICK X 1.2500" X 92.5000"

<<<----- SPECIFICATIONS ----->>>

Ga Tol + 0.0000 - 0.0000 Pc/Tag 2

WthTol + 0.1250 - 0.0000 Wt/Skd

LthTol + 0.0000 - 0.0000 Ty Pk

MATERIAL 2 PCS @ 55.0000 EA 110.00

4 ALUMINUM PLATE 7075-T651 DOMESTIC 22 PCS 4.1666 ft 990 LBS

1.250" THICK X 7.0000" X 50.0000"

<<<----- SPECIFICATIONS ----->>>

Ga Tol + 0.0000 - 0.0000 Pc/Tag 22

WthTol + 0.0630 - 0.0000 Wt/Skd

LthTol + 0.0630 - 0.0000 Ty Pk

MATERIAL 22 PCS @ 154.8359 EA 3,406.39

5 ALUMINUM PLATE 7075-T651 DOMESTIC 2 PCS 65 LBS

1.50" THICK X 1.5000" X 133.6250" 4.13

<<<----- SPECIFICATIONS ----->>>

Q U O T A T I O N

No: PEC ST-83833

Quoted By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: ( 20115)  
 DART AEROSPACE

Quoted Ship To: ( 1)  
 DART AEROSPACE

Q U O T A T I O N						QT No: PEC ST-83833
Ga Tol +	0.0000	-	0.0000	Pc/Tag	2	
WthTol +	0.1250	-	0.0000	Wt/Skd		
LthTol +	0.0000	-	0.0000	Ty	Pk	
MATERIAL				2 PCS @	144.4400 EA	288.88
<hr/>						
6	ALUMINUM PLATE 7075-T651 DOMESTIC				3 PCS	152 LBS
1.750" THICK X 2.2500" X 122.5000"						
<<<----- SPECIFICATIONS ----->>>						
Ga Tol +	0.0000	-	0.0000	Pc/Tag	3	
WthTol +	0.1250	-	0.0000	Wt/Skd		
LthTol +	0.0000	-	0.0000	Ty	Pk	
MATERIAL				3 PCS @	321.5233 EA	964.57
<hr/>						
7	ALUMINUM PLATE 7075-T651 DOMESTIC				4 PCS	305 LBS
1.00" THICK X 5.0000" X 147.5000"						
<<<----- SPECIFICATIONS ----->>>						
Ga Tol +	0.0000	-	0.0000	Pc/Tag	4	
WthTol +	0.1250	-	0.0000	Wt/Skd	49.146	
LthTol +	0.0000	-	0.0000	Ty	Pk	
MATERIAL				4 PCS @	295.1550 EA	1,180.62

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
 TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*

\*\* REFERENCED ON IT \*\*

Price in effect at time of shipment.

Price based on receipt of total order.

All weights are theoretical.

All orders are subject to credit approval.

\*\*\*\* TEL. 800-926-2600 \*\*\*\*

\*\*\* CUSTOMER PICK-UP HOURS \*\*\*

\*\*\* 9:00 AM TO 4:00 PM \*\*\*

\*\*\*\*\*

\* WE STOCK STAINLESS STEEL!!!! \*  
 \* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*

\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE

ADDED TO EVERY ORDER.\*\*\*

\*\*\*\*\*

\*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

\*VISIT OUR WEBSITE: [www.copperandbrass.com](http://www.copperandbrass.com)

\*\*\*\*\*

NO CANCELLATIONS ON PROCESSED MATERIAL.

Q U O T A T I O N

No: PEC ST-83833

Quoted By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 905-738-9033

Quoted To: ( 20115)  
 DART AEROSPACE

Quoted Ship To: ( 1)  
 DART AEROSPACE

=====

Q U O T A T I O N

QT No: PEC ST-83833

\*\*\*\*\*

Order Totals: 7 Items 1687 LBS

\*\*\*\*\*

Material	Processing	Freight	Other	Taxes	ORDER AMT
6,403.64			25.00	835.71	7,264.35

\*\*\*\*\*

Taxes: ONHSTS	835.71	0.00	0.00	0.00
---------------	--------	------	------	------

21Aug17 12:53

## S A L E S   A C K N O W L E D G M E N T

No: PEC ST-84421

Sold By:

THYSSENKRUPP MATERIALS NA

2821 LANGSTAFF ROAD

CONCORD, ONTARIO L4K 5C6

Tel: 905 669 9444 Fax: 905-738-9033

Ship From:

THYSSENKRUPP MATERIAUX NA

4700 BOIS FRANC

ST. LAURENT, QC H4S 1A7

Sold To: ( 20115)

DART AEROSPACE

1270 ABERDEEN ST

HAWKESBURY, ON K6A 1K7

Ship To: ( 1)

DART AEROSPACE

1270 ABERDEEN ST

HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS

Frt PREPAID

Con 96294

Slp STAN IVERS (905-532-1350)

Ord 21Aug17 Due22Aug17

Via VIM DELIVERY

PO/Rel 37472

Tel 613-632-9577 Fax 613-632-1053

FOB CONCORD

## S A L E S   A C K N O W L E D G M E N T   SO No PEC ST-84421

Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

1 STAINLESS STEEL ROUND BAR 17-4 STAINLESS	1 PCS	18 LBS
.750" DIA X 144.0000"		12 FT
MATERIAL	12 FT @ 7.9000 FT	94.80
ENERGY & CAP SURCHG	25.0000 LOT	25.00
2 STAINLESS STEEL ROUND BAR 303 STAINLESS	4 PCS	72 LBS
.750" DIA X 144.0000"		48 FT
MATERIAL	48 FT @ 4.4200 FT	212.16
3 ALUMINUM FLAT BAR 6061-T6511	2 PCS	5 LBS
.125" x .750" X 240.0000"		40 FT
MATERIAL	40 FT @ 1.3750 FT	55.00

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*

\*\* REFERENCED ON IT \*\*

\*\* CUSTOMER PICK-UP HRS / 9:00 AM TO 4:00 PM \*\*

\*\*\* TEL. 800-926-2600 \*\*\*

\*\*\*\*\*

\* WE STOCK STAINLESS STEEL!!!! \*

\* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*

\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
ADDED TO EVERY ORDER.\*\*\*

\*\*\*\*\*

\*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

\*VISIT OUR WEBSITE: [www.copperandbrass.com](http://www.copperandbrass.com)

\*\*\*\*\*

NO CANCELLATIONS ON PROCESSED MATERIAL.

\*\*\*\*\*

Order Totals: 3 Items 95 LBS

\*\*\*\*\*

Material	Processing	Freight	Other	Taxes	ORDER AMT
----------	------------	---------	-------	-------	-----------

Page: 1 ....Continued





21Aug17 15:04

## S A L E S   A C K N O W L E D G M E N T

No: PEC ST-84556

Sold By:

THYSSENKRUPP MATERIALS NA

2821 LANGSTAFF ROAD

CONCORD, ONTARIO L4K 5C6

Tel: 905 669 9444 Fax: 905-738-9033

Sold To: ( 20115)

DART AEROSPACE

1270 ABERDEEN ST

HAWKESBURY, ON K6A 1K7

Ship To: ( 1)

DART AEROSPACE

1270 ABERDEEN ST

HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS

Frt PREPAID

Con 96294

Slp STAN IVERS (905-532-1350)

Ord 21Aug17 Due23Aug17

Via O/T

PO/Rel 37472

Tel 613-632-9577 Fax 613-632-1053

FOB CONCORD

## S A L E S   A C K N O W L E D G M E N T   SO No PEC ST-84556

Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

1 ALUMINUM PLATE 7075-T651 DOMESTIC	22 PCS	990 LBS
1.250" THICK X 7.0000" X 50.0000"		

&lt;&lt;&lt;----- SPECIFICATIONS -----&gt;&gt;&gt;

Ga Tol + 0.0000 - 0.0000 Pc/Tag 22

WthTol + 0.0630 - 0.0000 Wt/Skd

LthTol + 0.0630 - 0.0000 Ty Pk

MATERIAL 22 PCS @ 154.8359 EA 3,406.39

2 ALUMINUM FLAT BAR 6061-T6511	1 PCS	128 LBS
2.00" x 4.50" X 144.0000"		12 FT
MATERIAL	12 FT @	26.6700 FT 320.04

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*

\*\* REFERENCED ON IT \*\*

\*\* CUSTOMER PICK-UP HRS / 9:00 AM TO 4:00 PM \*\*

\*\*\* TEL. 800-926-2600 \*\*\*

\*\*\*\*\*

\* WE STOCK STAINLESS STEEL!!!! \*

\* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*

\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
ADDED TO EVERY ORDER.\*\*\*

\*\*\*\*\*

\*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

\*VISIT OUR WEBSITE: [www.copperandbrass.com](http://www.copperandbrass.com)

\*\*\*\*\*

NO CANCELLATIONS ON PROCESSED MATERIAL.

\*\*\*\*\*

Order Totals: 2 Items 1,118 LBS

\*\*\*\*\*

Material	Processing	Freight	Other	Taxes	ORDER AMT
3,726.43				484.44	4,210.87

21Aug17 15:04        S A L E S   A C K N O W L E D G M E N T        No: PEC ST-84556  
Sold By:  
THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 905-738-9033

Sold To:    ( 20115)  
DART AEROSPACE

Ship To:    (   1)  
DART AEROSPACE

=====

S A L E S   A C K N O W L E D G M E N T	SO No PEC ST-84556
---	--------------------

Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

\*\*\*\*\*

Taxes: ONHSTS        484.44



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO37472

Purchase Order Date 8/18/2017

PO Print Date 8/18/2017

Page Number 1 of 4

Order From : VC-COP001  
THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Ship To : DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

E-MAILED  
AUG 21 2017

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Customer POID	
		Customer Tax #	10127-2607
Ship To Contact		Terms	Net 30
Ship To Phone		Currency	CAD
Ship Via:	VENDOR'S TRUCK	FOB	FCA - (Free Carrier)
Ship Acct:			

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M174R0.750	17-4 round bar .750	8/31/2017 Yes 8/31/2017		12.00 f	\$7.95	\$95.40
17-4PH/S17400/TYPE 630 SS ROUND BAR PER AMS 5643/ASTM A564 GRAIN MUST BE ALONG LENGTH OF BAR. MINIMUM YIELD TENSILE STRENGTH = 100KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI							

Line Total: \$95.40

2	M303R0.750	303 Round Bar 0.750	8/31/2017 Yes 8/31/2017		48.00 f	\$4.42	\$212.16
---	------------	---------------------	-------------------------------	--	------------	--------	----------

MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582

NOTE: AISI 304/316 NOT ACCEPTABLE

SP 17-8-23.

Line Total: \$212.16

PO Instructions: no pec st-83832 and st-83833

Note:

8/18/2017



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO37472

Purchase Order Date 8/18/2017

PO Print Date 8/18/2017

Page Number 2 of 4

Order From : VC-COP001  
THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Ship To : DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Contact Name

Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via:

VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

3	M6061T6B00750X00.125	6061-T6 Bar .750 x .125	8/31/2017	40.00	\$1.38	\$55.00
			Yes	f		
			8/31/2017			

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR  
ASTM B221

807-8-23

Line Total: \$55.00

4	M6061T6B2.000X04.500	6061 T6 Bar 2.00 x 4.500 (cut to 5.00 OR 5.625 +.030"/-.000)	8/31/2017	12.00	\$26.67	\$320.00
			Yes	f		
			8/31/2017			

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR  
ASTM B221

Line Total: \$320.00

PO Instructions: no pec st-83832 and st-83833

Note:

8/18/2017



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO37472**

Purchase Order Date 8/18/2017

PO Print Date 8/18/2017

Page Number 3 of 4

Order From : VC-COP001  
THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Ship To : DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Customer POID	
Ship To Contact		Customer Tax #	10127-2607
Ship To Phone		Terms	Net 30
Ship Via:	VENDOR'S TRUCK	Currency	CAD
Ship Acct:		FOB	FCA - (Free Carrier)

5	M7075T6S1.250X2.000	7075-T6 SHEET 1.250" X 2.000"	8/31/2017	36.13	\$12.59	\$454.84
		Yes		f		
		8/31/2017				

MAT'L 7075-T6/T62 ALUMINUM SHEET  
SPECS QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR PER ASTM B209

MAT'L 7075-T6/T62 ALCLAD ALUMINUM SHEET  
SPECS QQ-A-250/13 OR AMS-QQ-A-250/13 OR AMS 4049 OR PER ASTM B209

Line Total: \$454.84

6	M7075T6S0.750X1.250	M7075T6S0.750X1.250	8/31/2017	15.42	\$7.14	\$110.00
		Yes		f		
		8/31/2017				

MAT'L 7075-T6/T62 ALUMINUM SHEET  
SPECS QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR PER ASTM B209

MAT'L 7075-T6/T62 ALCLAD ALUMINUM SHEET  
SPECS QQ-A-250/13 OR AMS-QQ-A-250/13 OR AMS 4049 OR PER ASTM B209

Line Total: \$110.00

PO Instructions: no pec st-83832 and st-83833

Note:

8/18/2017





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO37472**

Purchase Order Date 8/18/2017

PO Print Date 8/18/2017

Page Number 4 of 4

**Order From :** VC-COP001  
THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

**Ship To :** DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

<b>Contact Name</b>		<b>Buyer</b>	Chantal Lavoie
<b>Vendor Phone</b>	905 669 9444	<b>Customer POID</b>	
<b>Ship To Contact</b>		<b>Customer Tax #</b>	10127-2607
<b>Ship To Phone</b>		<b>Terms</b>	Net 30
<b>Ship Via:</b>	VENDOR'S TRUCK	<b>Currency</b>	CAD
<b>Ship Acct:</b>		<b>FOB</b>	FCA - (Free Carrier)

7	M7075T6S1.250X7.000	7075-T6 SHEET 1.25" X 7.000" ORDER PRE CUT TO 50.00"	8/31/2017	92.00	\$37.03	\$3,406.38
---	---------------------	--	-----------	-------	---------	------------

Yes f

NOTE 22 PCS COT AT 50" LONG 8/31/2017  
MAT'L 7075-T6/T62 ALUMINUM SHEET  
SPECS QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR PER ASTM B209

MAT'L 7075-T6/T62 ALCLAD ALUMINUM SHEET  
SPECS QQ-A-250/13 OR AMS-QQ-A-250/13 OR AMS 4049 OR PER ASTM B209

**Line Total:** \$3,406.38

8	71401-45	PROCUREMENT QUALITY CLAUSES	8/31/2017	1.00	\$0.00	\$0.00
---	----------	--------------------------------	-----------	------	--------	--------

No

Procurement Quality Clauses 8/31/2017  
A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)  
A026 certification of material conformance  
A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

*SPR-8-23*

**Line Total:** \$0.00

**PO Total:** \$4,653.78

**PO Instructions:** no pec st-83832 and st-83833

**Note:** Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Change Nbr: 1

Change Date: 8/18/2017